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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 10/09/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,910

Applicant(s)

NAH ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 1-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Response to Arguments

Applicant's arguments filed July 23, 2003 have been fully considered but they are not persuasive.

- Response to remarks on page 8, lines 1-5: Applicant argue that the reference Yamamura does not teach a flat panel display. Examiner's reply: Yamamura does not explicitly specify the flat panel display, but Yamamura in paragraph 0016 and Fig. 6, paragraph 0033 discloses a CRT or LCD and the signal from a display unit 3 may detect the display size of a display unit in this screen size detector 16.
- Response to remarks on page 8, lines 6-19: Applicant argue that the reference Yamamura does not teach the first information includes measurement information. Examiner's reply: Yamamura in paragraph 0015 discloses Applicant's claim language "that detects the size of the source of an image with the signal from an image reproducer, the screen size selector which chooses display size of a image display unit, and a digital zoom circuit which enlarge or reduce images from the image reproduction apparatus based on the size information from the source of an image size detector circuit and the screen size selector and the size correction factor from arithmetic circuit".
- Response to remarks on page 8, lines 21-23: Applicant argue that the reference Kusunuki fails to teach the "flat panel display". Examiner's reply: Kusunuki in claim 23 on page 17, claims "an information processing apparatus provided with a

flat panel display capable of displaying a document object". See paragraph 0154 of Kuzunuki, a CRT and a liquid display can be used instead of projectors.

- Response to remarks on page 9, lines 1-11: Applicant argue that there is no motivation to combine the teaching of Kuzunuki with the teaching of Yamamura. Examiner's reply: Yamamura's invention relates to an image size compensator which corrects image size in case the size of the source of an image differs from the size which should be displayed. The advantages of Kuzunuki's invention are achieved in part by recognizing a user gesture for holding or releasing the image or actual object displayed on the above-mentioned display surface in a gesture recognition method. This function is achieved in the information processor which provides the method for recognizing the hand gesture of the operator from the image input from the camera device and operates the image on the display surface according to the result of this gesture recognition method. The motivation for combining the two references are: the information processor, which provides the method for recognizing, implemented into Yamamura's invention will be a complete inexpensive real size display system. Not only recognizes the display information in respect to an image, but also be able to recognize the image.
- Response to remarks on page 9, lines 17-23: Applicant argues that the reference Itagaki fails to disclose all the features of claims 1 and 5. Examiner's reply: See above paragraphs.
- Applicant should be able to provide the differences of "flat display system" as claimed by applicant, vs LCD display system.

- The previous rejection of office action is still maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 7 and 9-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura, and further in view of Kuzunuki.

1. Claim 1.

“A real size display system, comprising: a flat panel display unit for displaying image information and providing information on installed dot size; and an image converter that receives first image information, converts the first image information into second image information and outputs the second information to the flat panel display unit, wherein the first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. The step of the first image information includes measurement information is obvious because the first image can be provided by picture device or camera. This device can estimate the distance of an object. And

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also the step of converting first image information into second image information is obvious because by converting a first image information (an image from camera or etc.) , creating a second image information (the actual size of an object). But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts. And also the information processor, which provides the method for recognizing, implemented into Yamamura's invention will be a complete inexpensive real size display system. Not only recognizes the display information in respect to an image, but also be able to recognize the image.

2. Claim 3.

"The real size display system according to claim 1, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image information, thereby enabling real size display as desired by a user", Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. But Yamamura does not explicitly specify the flat panel display.

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However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

3. Claim 5.

“A real size display system, comprising: a photographing unit for photographing an image of a subject, and outputting first image information that includes measurement information of the subject; a flat panel display unit for displaying image information and providing information on installed dot size; and an image converter that receives first image information, converts the first image information into second image information and outputs the second information to the flat panel display unit, wherein the first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. The step of the first image information includes measurement information is obvious because the first image can be provided by picture device or camera. This device can estimate the distance of an object. And also the step of converting first

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image information into second image information is obvious because by converting a first image information (an image from camera or etc.) , creating a second image information (the actual size of an object). But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

4. Claim 7.

“The real size display system according to claim 5, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image information, thereby enabling real size display as desired by the user”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with

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computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

5. Claim 9.

The step is obvious, because Yamamura in paragraph 0015 teaches the step of “The real size display system according to claim 1, wherein a real size of a subject of the first image information and the second image information is measured to generate the measurement information”.

6. Claim 10.

The step is obvious, because Yamamura in paragraph 0015 teaches the step of “The real size display system according to claim 9, wherein the (Yamamura in paragraph 0016 teaches a LCD) flat panel display unit uses the second image information to display an image of the subject and a size of the displayed subject is the real size of the subject.

7. Claim 11.

The step is obvious, because Kuzunuki in paragraph 0013 teaches the step of “The real size display system is according to claim 5, wherein a distance between the subject and the image of the subject is measured to generate the measurement information”.

8. Claim 12.

The step is obvious, because Kuzunuki in paragraph 0013 teach the step of “The real size display system according to claim 10, wherein the flat panel display unit uses the second image information to display a second image of the subject and a size of the displayed subject is the real size of the subject”.

9. Claim 13.

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The step is obvious, because Kuzunuki in paragraph 0067-0069, in Fig. 31 steps S410, and S405-S406, teach the step of "The real size display system according to claim 1, wherein the flat panel display unit comprises at least one of a button, a switch, a touch-operated icon on a screen of the flat panel display for enabling real-size display operation".

10. Claim 14.

The step is obvious, because Kuzunuki in paragraph 0067-0069, in Fig. 31 steps S410, and S405-S406, teach the step of "The real size display system according to claim 5, wherein the flat panel display unit comprises at least one of a button, a switch, a touch-operated icon on a screen of the flat panel display for enabling real-size display operation".

11. Claims 2, 4, 6 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura, and further in view of Itagaki.

12. Claim 2.

"The real size display system according to claim 1, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data", Yamamura does not explicitly specify the image information. But Itagaki teaches in (col. 24, lines 57-66) that which is shown in FIG. 47, the synchronizing signal generating circuit 200 supplies dot clock signals, horizontal synchronizing signals--HSYNCA, HSYNCB and HSYNCC and vertical synchronizing signals--VSYNC to peripheral ICs in response to 12 times the chrominance sub carrier frequency. As a result, an image can be displayed in synchronization with an external image by the video encoder unit 112.

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Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

13. Claim 4.

"The real size display system according to claim 1, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on the dot size information provided from the display unit, and outputs the second image information to the flat panel display unit", Yamamura does not explicitly specify the RGB components. However, Itagaki teaches in (col. 3, lines 18-27) the conventional game computer uses BG image data generally composed of only external block sequential data, each block being indicated by 8-by-8 dots, the image is displayed by an RGB system.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of

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sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

14. Claim 6.

“The real size display system according to claim 5, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data”, Yamamura does not explicitly specify the image information. But Itagaki teaches in (col. 24, lines 57-66) that which is shown in FIG. 47, the synchronizing signal generating circuit 200 supplies dot clock signals, horizontal synchronizing signals--HSYNCA, HSYNCB and HSYNCC and vertical synchronizing signals--VSYNC to peripheral ICs in response to 12 times the chrominance sub carrier frequency. As a result, an image can be displayed in synchronization with an external image by the video encoder unit 112.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

15. Claim 8.

“The real size display system according to claim 5, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on the dot size information provided from the display unit,

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and outputs the second image information to the flat panel display unit”, Yamamura does not explicitly specify the RGB components. However, Itagaki teaches in (col. 3, lines 18-27) the conventional game computer uses BG image data generally composed of only external block sequential data, each block being indicated by 8-by-8 dots, the image is displayed by an RGB system.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki’s method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

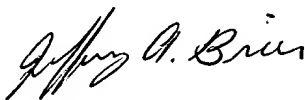
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
Art Unit 2672

Javid Amini


JEFFERY BRIER
PRIMARY EXAMINER